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| Rev | Date | Comments |
|-----|----------|--------------------|
| | 04.22.13 | Bid and Permit Set |

| Rooftop Unit Schedule | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|--------------|------------|--------------|----------------------|--------------------------------|------------------------|------------------------|---------------------------------|---------------------------------|------|------|------|-------------|-----------------|-----------------|---------------|-----------|-----------------|-------------------|---------------|-------|-------|---------|---------|---------|----------------------------|-------------|-------------------------|--------------|
| Item No. | Equip. Type | Indoor Fan | Nominal Tons | MIN. Outside Air CFM | Ext. Static Pressure IN. H O 2 | Total Capacity MBTU/HR | Sens. Capacity MBTU/HR | Dry/Wet Bulb Enter Cond., Deg F | Dry/Wet Bulb Enter Evap., Deg F | SEER | EER | IEER | Required BH | Input MBH (GAS) | Output MBH AFUE | No. of Stages | Pipe Size | MIN. MTR HP/BHP | Area Served | Input Voltage | Phase | HZ | FLA | MCA | MOCP | Basis of Design | Notes | Approximate Equip. Size | Weight (Lbs) |
| RTU-1 | GAS-FIRED/DX | 2200 CFM | 6.0 | 500 | 1.2 | 74.0 | 54.1 | 94.5/75.0 | 82.7/67.0 | 0 | 12 | 13 | 34.421 | 72/50 | 59/41 (82%) | 2 | 1/2" | -1/86 | UPPER OPEN OFFICE | 460 V | 3 | 60 Hz | 13.90 A | 21.10 A | 30.00 A | CARRIER 48HCDA07H2A6-2F2F0 | 1,2,3,4,5,6 | 88.15"x59.5"Wx55.5"H | 1050 |
| RTU-2 | GAS-FIRED/DX | 1450 CFM | 4.0 | 350 | 1.0 | 49.5 | 35.7 | 94.5/75.0 | 84.1/69.9 | 15.6 | 13 | 0 | 39.200 | 72/50 | 59/41 (82%) | 2 | 1/2" | -0/97 | UPPER ADMIN | 460 V | 3 | 60 Hz | 8.40 A | 13.10 A | 15.00 A | CARRIER 48HCDA05D2A6-2K2F0 | 1,2,3,4,5 | 74.4"x46.75"Wx55.5"H | 850 |
| RTU-SH1 | GAS-FIRED/DX | 4500 CFM | 12.5 | 1100 | 1.2 | 151.0 | 117.2 | 94.5/75.0 | 80.0/65.5 | 0 | 12.2 | 13.9 | 105.600 | 150/120 | 120/96 (80%) | 2 | 1" | -2/80 | SHOWROOM SOUTH | 460 V | 3 | 60 Hz | 31.20 A | 38.60 A | 45.00 A | CARRIER 48HCDD14HCA6-6F2M0 | 1,2,3,4,5,6 | 116.0"x63.4"Wx71.4"H | 1800 |
| RTU-SH2 | GAS-FIRED/DX | 4500 CFM | 12.5 | 1100 | 1.2 | 151.0 | 117.2 | 94.5/75.0 | 80.0/65.5 | 0 | 12.2 | 13.9 | 105.600 | 150/120 | 120/96 (80%) | 2 | 1" | -2/80 | SHOWROOM NORTH | 460 V | 3 | 60 Hz | 31.20 A | 38.60 A | 45.00 A | CARRIER 48HCDD14HCA6-6F2M0 | 1,2,3,4,5,6 | 116.0"x63.4"Wx71.4"H | 1800 |

1. ROOF TOP UNITS SHALL BE INSTALLED ON FACTORY CURB. RTU's SHALL BE EQUIPPED WITH FACTORY BKR DISCONNECT.

2. T-STAT FOR HVAC UNITS SHALL BE LOCATED PER DRAWING PLANS. TEMPERATURE SENSOR SHALL BE WALL MOUNTED WITH CLEAR LOCKABLE COVER AND BUILT-IN CO2 SENSOR AS SHOWN ON PLAN.
3. ALL ROOF TOP UNITS SHALL HAVE MANUFACTURER INSTALLED MAINTENANCE RECEPTACLE (NEMA 5-15R GFCI) WITH TRANSFORMER POWERED THROUGH EQUIPMENT SERVICE.

4. MECHANICAL EQUIPMENT SHALL BE EQUIPPED WITH RETURN AIR DUCT AVERAGE TEMPERATURE SENSORS THAT ARE INTERLOCKED WITH REMOTE WALL TEMPERATURE SENSOR SHOWN ON PLAN.
5. EQUIPMENT SHALL BE EQUIPPED WITH FIELD INSTALLED DRIVE FOR PROPER OPERATION.

4. ALL RTUS SHALL BE EQUIPPED WITH RETURN AIR DUCT INSTALLED CO2 SENSOR THAT CONTROL THE OA DAMPER TO HAVE CLOSE POSITION DURING UNOCCUPIED SEQUENCE, 40% DURING NORMAL OPERATION, 60% AT MEDIUM-LOW CO2 (500 PPM) SENSING, 80% AT MEDIUM-HIGH CO2 (700 PPM) SENSING AND 100% AT HIGH CO2 (900 PPM) SENSING; ALL PERCENTAGE OPENING IS BASED ON THE SCHEDULED OUTSIDE AIR QUANTITY.

| Split System AHU Schedule | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---------------|---------------------|--------------|-----------|----------------------|--------------------------------|-----------------------|-----------------------|-------------------|---------------|-------------------|--------------------------|-----------------|---------------|------------------------------|---|----------------------------|-------------------------------|---------------|-------|-------|---------|---------|---------|-------------------------------|--------------|
| Item No. | Equip. Type | Type | Nominal Tons | Total CFM | MIN. Outside Air CFM | Ext. Static Pressure IN. H O 2 | Total Capacity BTU/HR | Sens. Capacity BTU/HR | Coil Design Basis | Motor HP, MIN | Filter | Heater Rating, KW | No. of Elements | No. of Stages | Aux. Elec. Heat Design Basis | Notes | Basis of Design | Area Served | Input Voltage | Phase | HZ | FLA | MCA | MOCP | Approximate Equip. Size | Weight (Lbs) |
| DS-1 | FAN COIL UNIT | WALL MOUNT DUCTLESS | 2.0 | 630-900 | --- | 0.4 | 24,000 | 16,800 | FURNISHED | 1/15 | FURNISHED | ---- | ---- | ---- | ---- | A, B | CARRIER 40QAB024 | DATA UPPER LEVEL | 208 V | 1 | 60 Hz | 2.40 A | 3.10 A | 15.00 A | ---- | 65 |
| DS-2 | FAN COIL UNIT | WALL MOUNT DUCTLESS | 1.0 | 410-750 | --- | 0.4 | 12,000 | 8,400 | FURNISHED | 1/15 | FURNISHED | ---- | ---- | ---- | ---- | A, B | CARRIER 40QAB012 | ELEV MACHINE UPPER LEVEL | 208 V | 1 | 60 Hz | 1.70 A | 0.00 A | 0.00 A | ---- | 65 |
| FCU-1 | FAN COIL UNIT | VERTICAL/UP FLOW | 5.0 | 1900 | 400 | 0.6 | 60,000 | 41,700 | CARRIER FURNISHED | 3/4 | CARRIER FURNISHED | 7.5 @ 208V (10.0 @ 230V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB006-010 | SALES OPEN CUBICLES | 208 V | 1 | 60 Hz | 42.80 A | 51.90 A | 60.00 A | 24.75"Wx22.1"Dx53.5"H | 210 |
| FCU-2 | FAN COIL UNIT | VERTICAL/UP FLOW | 4.0 | 1400 | 350 | 0.6 | 48,000 | 33,500 | CARRIER FURNISHED | 1/2 | CARRIER FURNISHED | 6.0 @ 208V (8.0 @ 203V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB006-008 | SALES OPEN CUBICLES | 208 V | 1 | 60 Hz | 33.10 A | 40.35 A | 50.00 A | 24.75"Wx22.1"Dx53.5"H | 210 |
| FCU-3 | FAN COIL UNIT | VERTICAL/UP FLOW | 4.0 | 1430 | 250 | 0.6 | 42,000 | 29,200 | CARRIER FURNISHED | 1/2 | CARRIER FURNISHED | 6.0 @ 208V (8.0 @ 203V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB003-008 | F&I/CASHIER/NVD | 208 V | 1 | 60 Hz | 33.10 A | 40.35 A | 50.00 A | 21.15"Wx22.1"Dx53.5"H | 175 |
| FCU-4 | FAN COIL UNIT | VERTICAL/UP FLOW | 3.0 | 1195 | 200 | 0.6 | 34,200 | 23,900 | CARRIER FURNISHED | 1/2 | CARRIER FURNISHED | 6.0 @ 208V (8.0 @ 203V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB003-008 | WARRANTY/SERV MGR/SERV LOUNGE | 208 V | 1 | 60 Hz | 33.10 A | 40.35 A | 50.00 A | 21.15"Wx22.1"Dx53.5"H | 175 |
| FCU-5 | FAN COIL UNIT | VERTICAL/UP FLOW | 5.0 | 1900 | 400 | 0.6 | 60,000 | 41,700 | CARRIER FURNISHED | 3/4 | CARRIER FURNISHED | 7.5 @ 208V (10.0 @ 230V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB006-010 | CAFE/CUSTOMER LOUNGE | 208 V | 1 | 60 Hz | 42.80 A | 51.90 A | 60.00 A | 24.75"Wx22.1"Dx53.5"H | 210 |
| FCU-6 | FAN COIL UNIT | VERTICAL/UP FLOW | 4.0 | 1300 | 250 | 0.6 | 42,000 | 29,500 | CARRIER FURNISHED | 1/2 | CARRIER FURNISHED | 6.0 @ 208V (8.0 @ 203V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB003-008 | SERVICE LOBBY | 208 V | 1 | 60 Hz | 33.10 A | 40.35 A | 50.00 A | 21.15"Wx22.1"Dx53.5"H | 175 |
| FCU-P1 | FAN COIL UNIT | VERTICAL/UP FLOW | 5.0 | 1900 | 300 | 0.6 | 60,000 | 41,700 | CARRIER FURNISHED | 3/4 | CARRIER FURNISHED | ---- | ---- | ---- | ---- | A | CARRIER FE4DNB006-000 | PARTS | 208 V | 1 | 60 Hz | 6.80 A | 8.50 A | 15.00 A | 24.75"Wx22.1"Dx53.5"H | 210 |
| FCU-SN1 | FAN COIL UNIT | VERTICAL | 20.0 | 6500 | 2500 | 1.5 | 266,000 | 174,000 | CARRIER FURNISHED | ---/2.40 BHP | CARRIER FURNISHED | ---- | ---- | ---- | ---- | W/ SUPPLY PLENUM DIFFUSER AND RA GRILLE | CARRIER 40RUAA25A2A6-0A1A0 | SERVICE SHOP NORTH | 460 V | 3 | 60 Hz | 6.40 A | 8.00 A | 15.00 A | 90.15"(H)x82.75"(W)x28.25"(D) | 750 |
| FCU-SS1 | FAN COIL UNIT | VERTICAL | 20.0 | 8000 | 3500 | 1.5 | 285,000 | 170,000 | CARRIER FURNISHED | ---/2.25 BHP | CARRIER FURNISHED | ---- | ---- | ---- | ---- | W/ SUPPLY PLENUM DIFFUSER AND RA GRILLE | CARRIER 40RUAA25A3A6-0A1A0 | SERVICE SHOP SOUTH | 460 V | 3 | 60 Hz | 9.70 A | 12.10 A | 20.00 A | 90.15"(H)x82.75"(W)x28.25"(D) | 750 |
| FCU-SS2 | FAN COIL UNIT | VERTICAL | 20.0 | 8000 | 3500 | 1.5 | 285,000 | 170,000 | CARRIER FURNISHED | ---/2.25 BHP | CARRIER FURNISHED | ---- | ---- | ---- | ---- | W/ SUPPLY PLENUM DIFFUSER AND RA GRILLE | CARRIER 40RUAA25A3A6-0A1A0 | SERVICE SHOP SOUTH | 460 V | 3 | 60 Hz | 9.70 A | 12.10 A | 20.00 A | 90.15"(H)x82.75"(W)x28.25"(D) | 750 |
| FCU-T | FAN COIL UNIT | VERTICAL/UP FLOW | 4.0 | 1700 | 400 | 0.6 | 48,000 | 33,500 | CARRIER FURNISHED | 3/4 | CARRIER FURNISHED | 7.5 @ 208V (10.0 @ 230V) | 1 | ---- | CARRIER FURNISHED W/ BKR | A | CARRIER FE4DNB006-010 | TECH SUPPORT/PARTS MGR | 208 V | 1 | 60 Hz | 42.80 A | 51.90 A | 60.00 A | 24.75"Wx22.1"Dx53.5"H | 210 |

| Split System CU Schedule | | | | | | | | | | | | | | | | |
|---|-----------------|----------------------------------|--------------------------|---|--------------|----------|---------------|-------|-------|---------|---------|---------|---------------------------|-------------------|-------------------------|--------------|
| Item No. | Type | Cond. Ambient Air Temp. In Deg F | Cooling Capacity, BTU/HR | Heating Capacity, BTU/HR | Minimum SEER | Location | Input Voltage | Phase | HZ | FLA | MCA | MOCP | Basis of Design | Matching Air Unit | Approximate Equip. Size | Weight (Lbs) |
| CU-1 | AIR COOLED - DX | 95 | 25,000 | 17,000 | 15.5 | ON ROOF | 208 V | 1 | 60 Hz | 15.00 A | 19.00 A | 25.00 A | CARRIER 38QR024C-3 (410A) | DS-1 | ---- | 200 |
| CU-2 | AIR COOLED - DX | 95 | 12,000 | 9,100 | 19.0 | ON ROOF | 208 V | 1 | 60 Hz | 8.20 A | 11.00 A | 15.00 A | CARRIER 38QR012C-3 (410A) | DS-2 | ---- | 125 |
| CU-SN1 | AIR COOLED - DX | 95 | 266,000 | ---- | 11.0/11.2 | ON GRADE | 460 V | 3 | 60 Hz | 35.00 A | 43.30 A | 50.00 A | CARRIER 38AUDA25A0A6-A2A0 | FCU-SN1 | 86.5"x67.15"x 58.5"(H) | 1050 |
| CU-SS1 | AIR COOLED - DX | 95 | 266,000 | ---- | 11.0/11.2 | ON GRADE | 460 V | 3 | 60 Hz | 17.00 A | 21.10 A | 25.00 A | CARRIER 38AUDA25A0A6-A2A0 | FCU-SS1 | 59.5"x46"x 64.5"(H) | 1050 |
| CU-SS2 | AIR COOLED - DX | 95 | 266,000 | ---- | 11.0/11.2 | ON GRADE | 460 V | 3 | 60 Hz | 17.00 A | 21.10 A | 25.00 A | CARRIER 38AUDA25A0A6-A2A0 | FCU-SS2 | 59.5"x46"x 64.5"(H) | 1050 |
| HP-1 | AIR COOLED - DX | 94.5 | 60,000 | 58,500 (3.74 COP/8.2 HSPF) | 14.0 | ON ROOF | 460 V | 3 | 60 Hz | 8.40 A | 10.30 A | 15.00 A | CARRIER 25HCB360 | FCU-1 | 35" SQ x39.2" (H) | 325 |
| HP-2 | AIR COOLED - DX | 94.5 | 48,000 | 46,000 (3.86 COP/8.8 HSPF) | 15.5 | ON ROOF | 460 V | 3 | 60 Hz | 8.10 A | 10.00 A | 15.00 A | CARRIER 25HCB348 | FCU-2 | 35" SQ x32.25" (H) | 300 |
| HP-3 | AIR COOLED - DX | 94.5 | 42,000 | 40,500 (3.64 COP/8.3 HSPF) | 14.5 | ON ROOF | 460 V | 3 | 60 Hz | 7.63 A | 9.30 A | 15.00 A | CARRIER 25HCB342 | FCU-3 | 35" SQ x39.2" (H) | 275 |
| HP-4 | AIR COOLED - DX | 94.5 | 34,200 | 34,400 (3.68 COP/8.1 HSPF) | 14.5 | ON ROOF | 460 V | 3 | 60 Hz | 5.70 A | 7.00 A | 15.00 A | CARRIER 25HCB336 | FCU-4 | 35" SQ x32.35" (H) | 225 |
| HP-5 | AIR COOLED - DX | 94.5 | 60,000 | 58,500 (3.74 COP/8.2 HSPF) | 14.0 | ON ROOF | 460 V | 3 | 60 Hz | 8.40 A | 10.30 A | 15.00 A | CARRIER 25HCB348 | FCU-5 | 35" SQ x39.2" (H) | 325 |
| HP-6 | AIR COOLED - DX | 94.5 | 42,000 | 40,500 (3.64 COP/8.3 HSPF) | 14.5 | ON ROOF | 460 V | 3 | 60 Hz | 7.63 A | 9.30 A | 15.00 A | CARRIER 25HCB360 | FCU-6 | 35" SQ x39.2" (H) | 275 |
| HP-P1 | AIR COOLED - DX | 94.5 | 60,000 | 58,500 (3.74 COP/8.2 HSPF) | 14.0 | ON ROOF | 460 V | 3 | 60 Hz | 8.40 A | 10.30 A | 15.00 A | CARRIER 25HCB360 | FCU-P1 | 35" SQ x39.2" (H) | 325 |
| HP-T | AIR COOLED - DX | 94.5 | 48,000 | 46,000 (3.86 COP/8.8 HSPF) | 15.5 | ON ROOF | 460 V | 3 | 60 Hz | 8.10 A | 10.00 A | 15.00 A | CARRIER 25HCB348 | FCU-T | 35" SQ x32.25" (H) | 300 |
| A. PROVIDE CONDENSATE PUMP AS REQUIRED | | | | C. HEAT ELEMENT OPERATION MAY BE SIMULTANEOUS WITH OUTDOOR HEATPUMP OPERATION AT DEFROST CYCLE. | | | | | | | | | | | | |
| B. INDOOR DUCTLESS (DS) UNIT IS POWERED THRU OUTDOOR ELECTRICAL CONNECTION. | | | | D. ROOF CONDENSING UNIT SHALL BE RACK MOUNT ON 12" STAND. | | | | | | | | | | | | |

| Mechanical Fan Schedule | | | | | | | | | | | | | | | | | |
|-------------------------|-------------|----------|-----------------|-------------------------------|-------------|-----------|-------------------|-----|---------------|-------|-------|------------|-----------------------|------------|--------------|-------------------------|-------------------|
| Item No. | Equip. Type | CFM | Static Pressure | Area Served | Speed (RPM) | MAX Sones | Fan Type | HP | Input Voltage | Phase | HZ | Drive Type | Basis of Design | Notes | Weight (Lbs) | Approximate Equip. Size | Roof/Wall Opening |
| EF-SD | FAN | 4500 CFM | 0.38 in-wg | SERVICE DRIVE | 1360 | 21.0 | CENT ROOF UPBLAST | 1.5 | 460 V | 3 | 60 HZ | BELT | GREENHECK CUBE-180-15 | 2,3,4,5 | 140 | 35.5" DIA x 44.5" H | 20.5" SQ |
| EF-T1 | FAN | 750 CFM | 0.50 in-wg | FIRST FLR MAIN TOILETS / JAN | 1272 | 6.0 | CENT ROOF | 1/4 | 120 V | 1 | 60 HZ | BELT | GREENHECK GB-101-4 | 1, 2, 3, 4 | 75 | 24.5" DIA x 39.5" H | 14.5" SQ |
| EF-T2 | FAN | 390 CFM | 0.38 in-wg | SECOND FLR MAIN TOILETS / JAN | 1550 | 7.4 | CENT ROOF | 1/4 | 120 V | 1 | 60 HZ | DIRECT | GREENHECK G-085-D | 1, 2, 3, 4 | 35 | 21.75" DIA x 30.5" H | 12.5" SQ |
| EF-T3 | FAN | 630 CFM | 0.25 in-wg | TECH LOCKER | 1550 | 7.4 | CENT ROOF | 1/4 | 120 V | 1 | 60 HZ | BELT | GREENHECK G-090-D | 1, 2, 3, 4 | 35 | 21.75" DIA x 30.5" H | 12.5" SQ |
| EF-T4 | FAN | 170 CFM | 0.25 in-wg | WOMEN'S LOCKER | 1300 | 2.6 | CENT ROOF | 1/4 | 120 V | 1 | 60 HZ | DIRECT | GREENHECK G-070-G | 1, 2, 3, 4 | 25 | 19.4" DIA x 28.0" H | 10.5" SQ |

1. FACTORY DISCONNECT SWITCH.

2. BACK DRAFT DAMPER.

3. 14" ROOF CURB.

4. CONTROL THROUGH TIME CLOCK.

5. PROVIDE AND INTALL H-O-A STARTER.

| Diffusers, Registers and Grilles | | | | | | | | | |
|----------------------------------|--------------------------|------------|---------------|----------|---------------------|--------|-----------------|--------------------|-------------|
| Item No. | Frame Type | Frame Size | Throat / Neck | Max Flow | Noise Criteria (dB) | Damper | Basis of Design | Terminal Type | Notes |
| EA1 | LAY-IN | 24" x 24" | 10" x 10" | 300 CFM | --- | OBD | TITUS 50F | EGG CRATE | ---- |
| EA2 | LAY-IN | 24" x 24" | 8" x 8" | 200 CFM | 20 | OBD | TITUS 50F | EGG CRATE | ---- |
| EA3 | Sidewall/Gyp Board | 14" x 10" | 10" x 6" | 120 CFM | --- | OBD | Titus 350ZRL | Sidewall | ---- |
| RA1 | LAY-IN | 24" x 24" | 20" x 20" | 1600 CFM | --- | OBD | TITUS 50F | EGG CRATE | ---- |
| RA2 | Lay-In | 24" x 24" | 14" DIA | 700 CFM | 18 | OBD | Titus 50F | Egg Crate | ---- |
| RA3 | LAY-IN | 24" x 24" | 12" DIA | 470 CFM | 26 | OBD | TITUS 50F | EGG CRATE | ---- |
| RA4 | LAY-IN | 24" x 24" | 10" DIA | 300 CFM | --- | OBD | TITUS 50F | EGG CRATE | ---- |
| RA5 | LAY-IN | 24" x 24" | 8" DIA | 160 CFM | --- | OBD | TITUS 50F | EGG CRATE | ---- |
| RB2 | SIDEWALL / GYPBOARD | ---- | 30" x 8" | 900 CFM | 24 | OBD | TITUS 350ZRL | SIDEWALL | ---- |
| SA1 | LAY-IN | 24" x 24" | 12" DIA | 450 CFM | 27 | N /A | TITUS TDC | LOUVERED FACE | ---- |
| SA2 | LAY-IN | 24" x 24" | 10" DIA | 330 CFM | --- | N /A | TITUS TDC | LOUVERED FACE | ---- |
| SA3 | LAY-IN | 24" x 24" | 8" DIA | 230 CFM | --- | N /A | TITUS TDC | LOUVERED FACE | ---- |
| SA4 | LAY-IN | 24" x 24" | 6" DIA | 110 CFM | --- | N /A | TITUS TDC | LOUVERED FACE | ---- |
| SC3 | DUCT MOUNT / SIDEWALL | ---- | 18" x 8" | 500 CFM | 20 | OBD | TITUS 300RL | BAR GRILLE | ---- |
| SD1 | METAL CEILING 4' SECTION | ---- | 10" DIA | 320 CFM | --- | ---- | TITUS ML-39 | LINEAR SLOT (3) 1" | 2. ALUMINUM |

1. ALL TERMINAL DEVICES SHALL HAVE FINISH MATCHING ADJACENT CEILING AND/OR WALL ARCH